

Nebraska Information Technology Commission Strategic Initiatives

Strategic Plan

Nebraska Statewide Telehealth Network

Objective

The Nebraska Statewide Telehealth Network will provide the opportunity for all hospitals and public health departments to connect, providing access to consultations with medical specialists, continuing medical education, transmission of digital clinical information, bioterrorism alerts and training for homeland security and other emergency management issues.

Benefits

The Nebraska Statewide Telehealth Network (NSTN) will implement the vision of a high-speed health video telecommunication information system capable of erasing distance as a barrier to access to high quality health care for all people in Nebraska. Research shows that telehealth telecommunications services will:

- Increase the ability to diagnose patients' illnesses;
- Improve the quality and administration of medical services;
- Strengthen rural physicians' ties to specialty care;
- Alleviate the isolation of rural providers;
- Enhance the ability to attract and retain primary care physicians, medical professionals and support staff;
- Facilitate the training of health professionals in rural communities; and
- Enable patients to stay close to home for their care.
- Improve access to consultations with mental health practitioners, radiologists, and other medical specialists.

In addition, the Nebraska Statewide Telehealth Network will enable the delivery of bioterrorism alerts and training to hospitals and public health departments across the state.

Current Status

- The Nebraska Hospital Association, in partnership with the Nebraska Public Service Commission, Nebraska Health and Human Services System, Nebraska Information

Technology Commission and Office of the Chief Information Officer, Nebraska Division of Communications, University of Nebraska, University of Nebraska Medical Center, Nebraska hospital telehealth hubs and hospitals, Central Nebraska Area Health Education Center, telecommunications providers, the Nebraska Information Network, and the Universal Services Administrative Company (Federal Universal Service Fund Administrator), is leading an effort to create a statewide telehealth network.

- In August 2004, connections between hub hospitals and their connecting rural hospitals were initiated; in addition other sites such as the Nebraska State Office Building were included. This initial test of the system is part of a systematic process for connecting all Nebraska hospitals, which are currently participating in Nebraska-based telehealth systems. Additionally, all hospitals that wish to participate will be incorporated into the system as they have the capability at their individual site.
- All rural hospitals have been offered the opportunity to purchase video conferencing equipment. This funding has been made available through various federal grant programs and through funding provided through the Nebraska Health and Human Services System. Additionally, options are being explored to fund endpoint video equipment in the public health departments. Currently, memorandums of understanding are being sought by the public health departments with their local hospitals to provide connectivity.
- The Public Service Commission is expected to approve plans for providing support for the Nebraska Statewide Telehealth Network through the Nebraska Universal Service Fund in September 2004. This funding will be part of a funding mechanism that includes the Universal Services Administrative Company, the Nebraska Public Service Commission and the individual hospitals.
- The Nebraska Office of Rural Health is planning a telehealth workshop on Sept. 10 in Kearney to help rural hospitals prepare to use the Nebraska Statewide Telehealth Network.

Future

- All Nebraska hospitals and health departments will be connected to the Nebraska Statewide Telehealth Network in 2005-2006.
- Additional telecommunications infrastructure will be deployed to enable the efficient operation of the Nebraska Statewide Telehealth Network. The plan submitted to the Nebraska Public Service Commission in July 2004 by the Nebraska Hospital Association includes the following components:
 - Connection routers at six hub sites;
 - Accord bridge added at one site;
 - Endpoint routers at 68 endpoint hospitals ;
 - Scheduling software;
 - Endpoint firewalls at 68 endpoint hospitals;

- Firewalls at 7 hub sites;
 - Gatekeeper technology;
 - Installation costs for T-1 lines and fiber for endpoint hospitals; and
 - Connectivity of the statewide network
- The plan submitted to the Public Service Commission plan envisions a network backbone connectivity scheme for 2004-2005 consisting of the following:
 - Scottsbluff to Grand Island --- 4 T-1 lines
 - North Platte --- Dark Fiber Solutions - 100 mbps line
 - Kearney to Grand Island --- 6 T-1 lines
 - Grand Island to Lincoln --- 4 T-1 lines
 - Grand Island to Omaha --- 6 T-1 lines
 - Grand Island (St. Francis Medical Center) to Central Nebraska AHEC --- 6 T-1 lines
 - Dark Fiber Solutions connection in Grand Island --- 100 mbps line
 - Lincoln (St. Elizabeth Regional Medical Center) to Omaha (UNMC) --- 1 T-1 line*
 - Lincoln (BryanLGH Medical Center) to Omaha (UNMC) --- 1 T-1 line*
 - Norfolk to Omaha --- 6 T-1 lines

*While this may initially be one T-1 line per location, an increase in subsequent years is likely.

- Rural hospitals that currently have multiple lines connecting them to two different hub hospitals will be able to access the services of any hub hospital in Nebraska through just one line in 2005-2006.
- Use of the network for consultations and continuing medical education will increase.

Recommended Actions

(NOTE: These recommendations are still subject to change, pending additional advice from those entities that are participating in this strategic initiative.)

- A. Integrate Nebraska Statewide Telehealth Network with statewide synchronous video network and Network Nebraska.** The value of a network increases as more connections are added. Connecting the Nebraska Statewide Telehealth Network with the proposed statewide synchronous video network creates more value than the sum of their values as independent networks. Integrating the Nebraska Statewide Telehealth Network with Network Nebraska may lead to more efficient use of state resources and potential cost savings or cost avoidance.

Actions include:

1. Identify options for integrating the Nebraska Telehealth Network with the statewide synchronous video network and Network Nebraska.
 - a. Lead Entity: Collaborative Aggregation Partnership

- b. Timeframe: May 31, 2004
- c. Funding: No funding required for this task

B. Provide continued support for telehealth through the Nebraska Universal Service Fund. On December 17, 2002, the Nebraska Public Service Commission approved the use of up to \$900,000 a year from the Nebraska Universal Service Fund to support telehealth. A detailed plan for support for the Nebraska Statewide Telehealth Network was submitted to the Commission by the Nebraska Hospital Association on July 9, 2004. The plan is expected to be approved in September. 2003-2004 support requested from the Nebraska Universal Service Funding is \$145,570. The total projected cost for the period July 1, 2004 through June 30, 2005 is \$813,766.23.

Actions include:

1. Report on any changes to legislation or regulations that would impact continued support of telehealth through the Nebraska Universal Service Fund to the Community Council and Nebraska Information Technology Commission at least annually.
 - a. Lead Entity: Telehealth Subcommittee
 - b. Timeframe: September 1, 2005
 - d. Funding: No funding required for this task

C. Ensure continued support for telehealth from the federal Universal Service Fund by monitoring federal legislation impacting the Universal Service Fund. The Rural Health Care Fund of the federal Universal Service Fund is a key funding component of the Nebraska Telehealth Network. Approximately \$536,000 of federal support will be provided for 2003-2004.

Actions include:

1. Monitor legislation, regulations, or other threats to the continued support of telehealth through the Nebraska Universal Service Fund and update the Community Council and Nebraska Information Technology Commission at least annually.
 - a. Lead Entity: Telehealth Subcommittee
 - b. Timeframe: September 1, 2005
 - c. Funding: No funding required for this task

D. Encourage continued cooperation of all entities involved in the development and management of the Nebraska Statewide Telehealth Network by facilitating meetings on specific issues as needed. Partners include hospitals across the state of Nebraska, the Nebraska Hospital Association, the Nebraska Health and Human Services System; the Nebraska Information Technology Commission/Office of the Chief Information Officer; the Nebraska Division of Communications; The University of Nebraska, the Nebraska Public Service Commission, and telecommunications providers.

Actions include:

1. Report on any issues or problems, and if necessary facilitate meetings to bring interested parties together to discuss and resolve the issue.
 - a. Lead Entity: Telehealth Subcommittee

- b. Timeframe: September 1, 2005
- c. Funding: No funding required for this task

E. Provide assistance to hospitals and to the Nebraska Hospital Association to address issues pertaining to centralized administration and network management. Members of CAP, the entity responsible for the development and administration of Network Nebraska, have provided technical assistance to the Nebraska Statewide Telehealth Network. As both Network Nebraska and the Nebraska Statewide Telehealth Network develop and address administration and network management, CAP may be able to provide assistance to the Nebraska Statewide Telehealth Network. Opportunities to leverage resources should be explored.

Actions include:

1. Meet with the Technical Subcommittee of the Nebraska Statewide Telehealth Network to discuss issues related to centralized administration and network management.
 - a. Lead Entity: Collaborative Aggregation Partnership
 - b. Timeframe: May 31, 2005
 - c. Funding: No funding required for this task

F. Provide assistance in promoting the use of the network to doctors, administrators, and health care providers. A workshop on telehealth targeting hospital technical staff and administrators was held in Grand Island on April 27, 2004. Another workshop is scheduled for September 10 in Kearney. Sponsors of the workshops have included the Nebraska Office of Rural Health and Central Nebraska Area Health Education Center. Another workshop is planned on September 10, 2004 in Kearney as part of the Nebraska Rural Health Association's annual conference. The event is sponsored by the Nebraska Rural Health Association and co-sponsored by the Nebraska Office of Rural Health and the University of Nebraska Medical Center. Many of the entities involved in health and medical education participate in the NITC's Telehealth Subcommittee. The NITC Telehealth subcommittee should serve as a vehicle for encouraging and coordinating educational and promotional programming to advance the use of telehealth.

Actions include:

1. Form a subcommittee to develop a plan for future educational programming.
 - a. Lead Entity: Telehealth Subcommittee
 - b. Timeframe: November 15, 2004
2. Organize at least one educational program on an issue related to the delivery and expansion of telehealth.
 - a. Lead Entity: Telehealth Subcommittee
 - b. Timeframe: September 1, 2005